

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1-54.(Canceled)

55. (New) A method of scheduling a plurality of time dependent tasks comprising:

- entering a plurality of tasks to be scheduled;
- entering a maximum amount of time allowed to generate the schedule;
- generating a small number of schedule permutations of the plurality of tasks to be scheduled using an enumerative brute force method;
- estimating an amount of time required to generate all possible schedule permutations for the plurality of tasks to be scheduled;
- determining whether the estimated amount of time is greater than the maximum amount of time allowed to generate the schedule;
- generating a schedule using the enumerative brute force method if the estimated amount of time required is not greater than the maximum amount of time allowed to generate the schedule;
- scheduling a small number of tasks using a deterministic programming method if the estimated amount of time required to generate all possible schedule permutations is greater than the maximum amount of time allowed to generate the schedule;
- estimating an amount of time required to generate a complete schedule of the plurality of tasks to be scheduled using the deterministic programming method;
- estimating an amount of memory space required to generate the complete schedule of the plurality of tasks to be scheduled using the deterministic programming method;
- determining whether the estimated amount of time required to generate the complete the schedule is greater than the maximum amount of time allowed to generate the schedule;

determining whether the estimated amount of memory space required to generate the complete schedule is greater than a maximum amount of memory space;

generating a complete schedule of the plurality of tasks to be scheduled using the deterministic programming module if the estimated amount of time required to generate the complete schedule is not greater than the maximum amount of time allowed to generate the schedule and the estimated amount of memory space is not greater than the maximum amount of memory space; and

generating a schedule using a genetic method if the estimated amount of time required to generate the complete schedule is greater than the maximum amount of time allowed or the estimated amount of memory space is greater than the maximum amount of memory space.